

Caring School Leadership and Enabling School Structure: A Predictive Study on the Psychological Capital of Online Educators

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Abstract

Teacher attrition continues to be a concern in the American school system. There are several reasons for teacher turnover, such as teachers perceived lack of administrative support and control over their work. Research has found several leadership styles to have a positive correlation to psychological capital, also known as PsyCap. The purpose of this study was to examine the extent to which caring school leadership and enabling school structure may predict online teachers' psychological capital. The study asked state-certified teachers in an online charter school in the northeastern United States to complete a self-report survey using the instruments of the Psychological Capital Questionnaire (PCQ-12), Caring School Leadership Questionnaire (CSLQ), and Enabling School Structure (ESS) survey. There were 152 participants who completed the survey. A multiple linear regression was conducted, and the results found a statistical significance in the extent caring school leadership and enabling school structure may explain the psychological capital of online teachers, demonstrating a large effect size. Even though virtual schools are a different type of school context, this study supports previous research on how positive leadership models and styles are antecedents to psychological capital. Since caring school leadership is a relatively newer construct, this study also adds to the literature by demonstrating it has a positive predictive correlation to online teachers' psychological capital.

Keywords: Psychological capital, caring school leadership, enabling school structure, online school, virtual school, cyber school

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Before the pandemic of 2020, there was already concern about teachers' well-being and the high percentage of teachers leaving the profession (Burkhauser, 2017; Castro et al., 2018). Some studies indicate that upwards of eight percent of teachers leave the profession every year (Carver-Thomas & Darling-Hammond, 2017; Kurland, 2019). There are mixed reports on the extent of the increase in teacher turnover that occurred during and after the pandemic, but some researchers see the current teacher attrition rate as similar to before the pandemic (Goldhaber & Theobald, 2023). The issue of teacher attrition is significant because when teacher turnover is high, studies have found that it can have a negative impact on school culture (Burkhauser, 2017; Carver-Thomas & Darling-Hammond, 2017) and student outcomes (Fuller et al., 2018; Geiger & Pivovarova, 2018). To address this negative trend of higher levels of teacher attrition, it is important that school leaders consider the triggers that may lead to this phenomenon. Research has found that low level of job satisfaction, lack of organizational commitment, teacher perception of low control in their work, and lack of administrative support were significant factors in teacher turnover (Chambers Mack et al., 2019; Geiger & Pivovarova, 2018; Jeon & Wells, 2018; Kurland, 2019).

School leadership has been found to be a significant component in addressing teacher retention as well as in establishing a culture where teachers sense they can thrive and improve work outcomes (Burkhauser, 2017; Carver-Thomas & Darling-Hammond, 2017; Geiger & Pivovarova, 2018; Perrone et al., 2019). The concept of teachers being able to thrive is addressed within the field of positive psychology, which focuses on how an individual's positive experiences and strengths can lead them to flourishing and experiencing contentment, success, and improved performance (Bozgeyikli, 2017; Gyu Park et al., 2017; Jensen, 2020).

From within the field of positive psychology, the theory of psychological capital emerged (Gyu Park et al., 2017; Luthans et al., 2016; Pitichat et al., 2018). This theoretical construct explains how psychological resources can help individuals improve work outcomes and their quality of life (Luthans et al., 2015; Luthans & Youssef-Morgan, 2017). This is relevant in examining patterns of teacher job satisfaction because of the positive correlation found between psychological capital and job satisfaction (Luthans et al., 2015; Manzano-Garcia & Ayala, 2017). Based on this understanding, the research question for this study was:

RQ: To what extent do caring school leadership and enabling school structure predict psychological capital for certified teachers in an online school?

In other words, as a multiple linear regression study (Keith, 2019), the focus was to examine the extent to which caring school leadership and enabling school structure can explain the phenomenon of the psychological capital of teachers in an online school where the school leadership uses virtual means to guide, influence, and direct teachers who primarily work remotely. This is a replication study; the original was conducted before the pandemic (Jensen, 2020). Now that society appears to have normalized into a post-pandemic world, the researcher wanted to find out if the results had changed from the original study.

Even though online schools have exponentially grown over the past decade or so (Leidner & Roch, 2024; Martin et al., 2020; Skousen & Vogel, 2024), there is limited research conducted within this educational model (Sivia & Robertson, 2022). Even within the realm of online education, models can vary from more asynchronous to synchronous (Alzahrani et al., 2023). An asynchronous model is structured for students to work through the online curriculum independently, where the teacher serves more as a facilitator. In contrast, the synchronous model is structured to use an online platform to provide a real-time,

interactive classroom environment where students have immediate interaction with their teachers and classmates (Alzahrani et al., 2023).

Most of the research conducted on virtual schools focused on student engagement and the academic performance of students (Martin et al., 2020; Sivia & Robertson, 2022; Waddell, 2017). Even though there is a growing number of studies specifically examining school leadership in a virtual context and the influence on employees within online schools, there is still a need for more research (Gustafson & Haque, 2020; Sivia & Robertson, 2022; Skousen & Vogel, 2024). Research on the working conditions of teachers in virtual schools has found that teachers reported strong administrative support (Leidner & Roch, 2024; Wiyono et al., 2023). There are significant differences between being a school leader in a brick-and-mortar school compared to the same experience in a virtual school (Partin & Derrington, 2023), whereas others have found no significant difference, but recognize the unique responsibilities and functions that a virtual school leader will encounter (Gustafson & Haque, 2020; Skousen & Vogel, 2024). For example, one competency that all leaders must demonstrate is communication, but for the leaders of online schools, there is the uniqueness of developing effective e-communication skills utilizing information and communication technology (ICT) (Gustafson & Haque, 2020; Skousen & Vogel, 2024).

Even when examining the wider field of e-leadership of virtual teams in general, there is still minimal research (Ahuja et al., 2023; Chua & Chua, 2017; Van Wart et al., 2019). However, several studies in e-leadership corroborate the findings specific to virtual school leadership that emphasize communication using ICTs (Ahuja et al., 2023; Van Wart et al., 2019). It has also been found that leaders of virtual teams may positively impact the well-being and motivation of the members of their teams. Due to the remote nature of employees working virtually, the online school leader needs to be even more focused to minimize feelings of isolation or loneliness (Ahuja et al., 2023; Van Wart et al., 2019). For this reason, it is beneficial to see what aspects of school leadership in online schools can positively impact teachers in thriving and flourishing within an environment that leads to them functioning at their fullest potential.

Literature Review

Psychological Capital

Luthans and Youssef-Morgan developed the theory of psychological capital. Luthans and colleagues (2015) define psychological capital as:

An individual's positive psychological state of development that is characterized by (1) having confidence (efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success (p. 2).

There are several criteria that were established as being necessary in the construct of psychological capital, including the need to be state-like, a higher-order construct, and psychological resources that are strength- and evidence-based (Carter & Youssef-Morgan, 2022; Luthans et al., 2015; Petersen & Youssef-Morgan, 2018). To be state-like, it was intended that the theory be malleable and able to change over the course of time (Alessandri et al., 2018; Luthans & Broad, 2022; Pitichat et al., 2018). To know that an individual's

psychological capital is able to change highlights the importance of the work environment (Alessandri et al., 2018). As a higher-order construct, it means the whole is greater than the individual parts. In other words, the overall measure of psychological capital is of more significance than the four psychological resources it incorporates, and the four resources work synergistically (Alessandri et al., 2018; Luthans et al., 2015; Viseu et al., 2016).

Based on the four psychological resources of hope, efficacy, resilience, and optimism, Luthans and Yousseff-Morgan (2017) have referred to psychological capital as “the HERO within” (p. 339; see also Luthans & Broad, 2022). The concept of hope, which was first developed by Snyder, includes both goal pathway and goal energy, with pathway being the way one maps out the strategy to achieve their goal, and energy being the motivation and agency to persevere until the goal is accomplished (Carter & Yousseff-Morgan, 2022; Jensen, 2020; Luthans et al., 2015). Efficacy is associated with Bandura’s theory and focuses on one’s level of confidence based on positive feedback, observing models of success, reflection on one’s own performance, and one’s response to various situations. Masten researched how a person responds to setbacks and established the theory of resiliency that looks at the mechanisms individuals use to persevere and overcome challenges. The final psychological resource that makes up psychological capital is optimism. This is associated with attributional style theory that emerged from the research of Seligman, Carver, and Scheier and focuses on how a person develops the expectation of achieving a positive outcome (Carter & Yousseff-Morgan, 2022; Luthans et al., 2015).

The construct of psychological capital has been well-researched since it was first introduced (Luthans et al., 2015), including several meta-analyses (Kong et al., 2018; Loghman et al., 2023; Wu & Nguyen, 2019). The most comprehensive meta-analysis examined 244 studies published during the period of 2007 to 2020 (Loghman et al., 2023). The findings of these meta-analyses were consistent with findings related to the outcomes of psychological capital, such as improved work performance, higher job satisfaction, and increased employee engagement (Kong et al., 2018; Loghman et al., 2023; Wu & Nguyen, 2019).

The research has found that positive leadership styles are a significant antecedent to psychological capital (Loghman et al., 2023; Luthans et al., 2015; Luthans & Yousseff-Morgan, 2017). In particular, several studies have examined various leadership styles, such as leader-member exchange, transformational, and authentic leadership models, and have found that there is a positive relationship between these leadership styles and the psychological capital of employees (Hu et al., 2018; Kong et al., 2018; Loghman et al., 2023).

Psychological capital has also been found to be associated with positive outcomes of employees (Alessandri et al., 2018; Loghman et al., 2023). Some of the positive outcomes that are important, when looking to improve teacher retention, include work performance (Huang et al., 2015; Kong et al., 2018) as well as the reduction of stress, anxiety, and employees’ intentions to leave (Luthans et al., 2016; Manzano-Garcia & Ayala, 2017; Xue et al., 2023). One particular study, which has significance for teachers at an online school, focused on technostress, which is the stress associated with learning new technology programs. This study found a negative correlation between technostress and psychological capital (Efilti & Coklar, 2019). Research also revealed that psychological capital has a positive relationship with the level of employee engagement in their work, which included informal workplace learning (Alessandri et al., 2018; Huang & Wang, 2021). When psychological capital is high, studies have found positive relationships with the overall well-being of employees (Kun & Gadanez, 2022; Kurt & Demirbolat, 2019; Manzano-Garcia &

Ayala, 2017), job satisfaction (Kong et al., 2018; Kurt & Demirbolat, 2019), and one's commitment to the organization (Karakus et al., 2019). Based on the wide-ranging positive outcomes of psychological capital, and the positive correlation with leadership styles, it is beneficial to see if caring school leadership and enabling school structure can also assist in explaining the phenomenon of teachers' psychological capital.

Caring School Leadership

The research on the positive impact of demonstrating caring in the helping professions is extensive, but the concept of caring school leadership is still in its infancy (Berkovich, 2023; Kurland; 2019; Louis et al., 2016). Most of the educational research on caring is related to the teacher-student relationship and its positive impact on students (Eldor & Shoshani, 2016; Kurland, 2019; Nilsson et al., 2015). In recent years, more research has examined the theory of caring school leadership and its influence on both students and faculty (Louis & Murphy, 2017; Smylie et al., 2016; van der Vyver et al., 2014a).

Even though the concept of care is recognized, there is not an agreed upon definition of caring school leadership, as the construct continues to evolve (Louis et al., 2016; Ryu et al., 2022). Based on the perspectives of different researchers, caring school leadership is multifaceted, incorporating the cognitive, affective, and behavioral domains (Jensen, 2020; Louis et al., 2016; Steilen & Stone-Johnson, 2023). Caring school leadership includes reciprocity, interdependence, and recursivity (Houghton et al., 2015; Louis et al., 2016; Nilsson et al., 2015). A working definition of caring school leadership is the positive relational connection of a school leader with the employees of the school, whereby the leader demonstrates service to others and genuine regard for their interests, needs, and overall well-being (Jensen, 2020; Steilen & Stone-Johnson, 2023). It is also important to note that school context may impact the form of caring school leadership (Ryu et al., 2022).

Caring school leadership is manifested in various forms, including kindness, empathy, fairness, empowerment, and service (Louis & Murphy, 2017; Smylie et al., 2016; van der Vyver et al., 2014a; Younger, 2021). Ultimately, caring school leadership is relational in nature, where the focus is on seeing others develop holistically in both their personal and professional lives (Louis et al., 2016; Smylie et al., 2016; van der Vyver et al., 2014a; Younger, 2021). When van der Vyver (2014b) and his colleagues developed the Caring School Leadership Questionnaire (CSLQ), they grouped different phenomena associated with caring leadership into three main determinants. The psychological determinant includes such actions as sympathy, expressing concern, showing respect for others, honesty, acceptance, and compassion. The management determinant is evidenced by trust, empowerment, active listening, accessibility, and support. The final determinant is associated with the physical space in which teachers work (van der Vyver 2014b). However, since virtual teachers work remotely, this determinant was not included in the study.

Even though there is not a significant amount of research associated with caring school leadership, the studies conducted demonstrate positive outcomes (Ryu et al., 2022; Steilen & Stone-Johnson, 2023). For example, caring school leadership has been found to be related to improving school climate (Kurland, 2019; Louis & Murphy, 2017; Louis et al., 2016). Specifically, caring school leadership can moderate the impact of emotional distance teachers experience, and thereby positively influence school climate (Berkovich, 2023). Not only does caring school leadership impact the climate of a school setting, but it has also been found to be related to improving the emotional well-being of teachers and increasing their performance (Eldor & Shoshani, 2016; Nilsson et al., 2015). Similar to what was found with

psychological capital, caring school leadership is also found to have a positive relationship with reducing stress and improving job satisfaction (Eldor & Shoshani, 2016).

Enabling School Structure

The study of organizational theory focuses on how to make organizations more efficient and effective in achieving their goals (Haveman & Wetts, 2019). Much research has specifically looked at the theory of bureaucracy and the corresponding structure that it manifests within organizations (Mitchell, 2019). The general impression that most people have of bureaucracy is negative in nature, with its rational-legal structure, with more rigid lines of authority and rules (Haveman & Wetts, 2019).

However, some have found that it is not necessarily bureaucracy per se, that is the issue, but rather if the leader uses the authority structures and written rules in a way that is either hindering or enabling (Kilinc et al., 2016; Sinden et al., 2004a). It is from this perspective that the concept of enabling school structure was developed (Hoy & Sweetland, 2001; Sinden et al., 2004b). It is accurate to see schools as bureaucratic organizations, consisting of an authority structure and written rules.

Hoy and Sweetland (2001) postulated that school structure includes the components of formalization and centralization. Formalization alludes to the rules within an organization. Centralization refers to the type of hierarchical authority structure of the organization (Hoy & Sweetland, 2001; Kilinc et al., 2016; Sinden et al., 2004a). It is the *structure* of these components that either enables or hinders teachers to be most effective in their roles.

Formalization and centralization can be conceptualized as existing along a spectrum, the poles of which stretch from hindering to enabling, which impact teachers' ability to perform. A matrix that identifies four types of school structures helps to illustrate how bureaucracy may be perceived (Hoy & Sweetland, 2001). At one end of the matrix is *hindering* bureaucracy consisting of high centralization and coercive formalization, where the overall school culture is characterized by compliance and a dominant leadership style. The *hierarchical* bureaucracy has high centralization, but enabling formalization with few rules, making the school structure more totalitarian, where what the leader says goes. The *rule-bound* bureaucracy is low centralization and hindering formalization, which results in an uncompromising reliance on rules and procedures. Finally, the more ideal structure is *enabling* bureaucracy, with low centralization and enabling formalization (Hoy & Sweetland, 2001).

Some studies have found that enabling school structure has a positive relationship to student academic performance (Anderson et al., 2018; Mitchell, 2019). Just as research found an association of caring school leadership and school climate, similar results were found when looking at the association between enabling school structure and school climate, especially within professional learning communities (Cerit, 2017; Gray et al., 2016). Similarly, enabling school structure can also impact teacher effectiveness (Anderson et al., 2018; Gray et al., 2016; Kilinc et al., 2016). For example, enabling school structure was found to positively correlate to the organizational commitment of teachers (Sinden et al., 2004b).

Materials and Methods

Participants

The participants for this study were drawn from a virtual charter school in the northeastern United States. The study used a purposive, convenience sample, where the participants from the online school were state-certified teachers, and all participants from a single online school system that provides synchronous instruction, by means of online technology platforms. The school setting is structured where there are three grade-band principals, which align with how teachers identified with either being part of the elementary, middle, or high school programs. For a multiple linear regression study, the minimum sample size, with a statistical power of .80 and a .05 alpha level, is $N > 104 + k$, whereby k is the number of predictor variables. For this study, the minimum sample size was 107 (Warner, 2013).

The researcher invited 394 online educators to participate and 183 started the survey. Only those who completed all questions in the survey were included in the statistical analysis, which ended up being 152 participants, which exceeds the minimum sample size. Most of the participants were women ($n = 134$, 88.2%). The majority of the participants were also over the age of 40 ($n = 109$, 71.7%) and had nine or more years of teaching experience ($n = 132$, 86.8%). The distribution among teachers in elementary school ($n = 43$, 28.3%), middle school ($n = 44$, 28.9%), and high school ($n = 65$, 42.8%) is similar to the online school in which the study was conducted.

Psychological Capital Questionnaire (PCQ-12)

The Psychological Capital Questionnaire measures one's overall psychological capital (PsyCap). The original version contained 24 items, but for increased adaptability in research, the developers created a shorter version (PCQ-12) containing only 12 items (Luthans et al., 2014). The instrument measures the four domains of hope, efficacy, resilience, and optimism which are associated with PsyCap. The PCQ-12 contains four items related to hope, three items associated with efficacy and resilience respectively, and two items for optimism (Luthans et al., 2014).

The PCQ-12 uses a 6-point Likert-type scale where 1 = strongly disagree and 6 = strongly agree. The scoring on the PCQ-12 can range between 12 to 72, where higher scores indicate a higher level of psychological capital (Luthans et al., 2014). For purposes of research, a cumulative mean score for each participant was used, where scores closer to six indicate higher levels of psychological capital. The PCQ-12 has been found to be valid and reliable with a strong internal consistency ($\alpha = .88$) (Luthans et al., 2014).

Caring School Leadership Questionnaire (CSLQ)

The Caring School Leadership Questionnaire measures the degree to which teachers feel cared for by their educational leader (van der Vyver et al., 2014a). The instrument contains three determinants: (a) psychological, (b) workplace (physical environment), and (c) management. Since this study focuses on educators who work remotely, the determinant that addresses the physical environment of the workplace was not included. The overall CSLQ contains 59 items, but only 45 items were used including the 25 items for the psychological determinant and the 20 items for the management determinant.

The CSLQ uses a 4-point Likert-type scale where 1 = not at all and 4 = to a large extent. The high score for the psychological and management determinants is 140, with an average caring score being between 88-92 (van der Vyver et al., 2014b). For purposes of

research, a cumulative mean score for each participant was used, where scores closer to 4 indicate higher levels of caring school leadership. The validation study conducted on the CSLQ demonstrated its very strong internal consistency ($\alpha = .98$).

Enabling School Structure Survey (ESS)

The Enabling School Structure (ESS) instrument was designed to measure the degree to which the bureaucratic structure of a school enables or hinders teacher autonomy and their ability to work (Hoy & Sweetland, 2001). The two main factors include formalization and centralization. Formalization focuses more on rules and centralization on the loci of authority in decision-making (Hoy & Sweetland, 2001).

The ESS contains 12 items using a 5-point Likert-type scale where 1 = never and 5 = always. Six of the items are negatively loaded and require reverse scoring. The scores can range from 12 to 60 with higher scores indicating a more enabling school structure (Sinden et al., 2004a). For research purposes, a cumulative mean score for each participant was used, where scores closer to 5 indicate higher levels of enabling school structure. In the validation study, three samples were used and the internal consistency ranged from $\alpha = .90$ to $\alpha = .95$.

Procedure

This study was a replication study that the researcher first conducted in Fall 2019 (Jensen, 2020). In both the original study and in this replication study, an online survey was created using SurveyMonkey. The informed consent was on the first page of the study and then was followed by four demographic questions related to gender, age, school grades taught (elementary, middle, or high school), and years of experience as an educator. To ensure anonymity, IP address tracking was disabled, and the anonymous response option was enabled.

After receiving permission from the chief school administrator of the online school to conduct research among the faculty, the researcher worked with the Human Resources personnel to obtain school-issued email addresses for all teachers within the school system. The researcher sent an introductory email to the faculty of the school introducing them to the purpose and intent of the research study. Participants were then notified of the study, through an automated email generated by SurveyMonkey, which provided the link to the study survey. Participants were given three weeks to complete the survey, with automatically generated reminders to any participants who had either not yet started the survey or had an incomplete survey.

At the completion of the survey window, the researcher used SPSS for statistical analysis. The researcher conducted descriptive statistics that determined the mean, standard deviation, and Cronbach's alpha scores associated with the three instruments used in the study. Then, the assumption tests associated with a multiple linear regression study were completed. Finally, the researcher ran the analysis, which included a regression model, model summary, and analysis of the coefficients.

Results

The research question examined to what extent psychological capital can be predicted from the linear combination of caring school leadership and enabling school structure for certified teachers in a virtual school. There was one case that was greater than 3 standard deviations ($SD = -3.585$), but when leverage values were examined (.054) and an analysis of

the influential point of Cook's Distance (.296) was performed, it was decided to keep the case within the data.

All assumptions for parametric inferential analysis using a multiple linear regression were met. Independence of observations was met by conducting the Durbin-Watson statistics, with a value of 1.71. Visual inspection of scatterplots demonstrated that the assumptions of linearity and homoscedasticity were tenable. The assumption that there was no multicollinearity was also met when examining the statistics of Tolerance (.677) and Variance Inflation Factor (1.477). There was one case ($SD = -3.585$) which was found to be a significant outlier. However, it was kept in the data set after Cook's Distance showed a value of .296, which is considered to be a safe value below 1.0. Finally, a P-P plot was conducted to determine if the residuals were normally distributed, and this assumption was also found to be tenable.

The descriptive statistics included demographic information of the participants, the mean score and standard deviation of the responses of the three instruments, and internal consistency statistics for the three instruments. On a six-point Likert scale, the mean teachers' psychological capital was 4.93 ($SD = 0.59$). On a four-point Likert scale, teachers' perception of caring school leadership was 3.34 ($SD = 0.77$). The teachers' perception of enabling school structure, using a five-point Likert scale, had a mean of 3.53 ($SD = 0.78$). The Cronbach's alpha for all three instruments demonstrated strong internal consistency (PsyCap = 0.858; CSLQ = 0.985; and ESS = 0.927). This is consistent with other studies that have used these instruments (Luthans et al., 2014; van der Vyver et al., 2014b; Hoy & Sweetland, 2001).

The results of the study found evidence that there is a statistically significant association between the predictor variables of caring school leadership and enabling school structure on the criterion variable of online teachers' psychological capital, where $F(2, 149) = 21.38, p < .001$ (Table 1).

Table 1

Regression Model Results

Model		<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig.
1	Regression	11.63	2	5.816	21.38	<.001 ^b
	Residual	40.53	149	.272		
	Total	52.16	151			

a. Dependent Variable: Psychological Capital scores

b. Predictors: (Constant), Caring School Leadership score, Enabling School Structure score

The overall model size was $R = .472$ and $R^2 = .223$, indicating a large effect size where a little over 22% of the variance of psychological capital may be explained, or accounted for, by the linear combination of caring school leadership and enabling school structure. (Table 2).

Table 2*Coefficients*

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
	<i>B</i>	<i>SE</i>	β		
1 (Constant)	3.436	.239		14.394	<.001
Caring Leadership	.203	.082	.218	2.486	.014
Enabling School Structure	.235	.066	.313	3.565	<.001

a. Dependent Variable: Psychological Capital

Discussion

The results of this study support the findings of the original study (Jensen, 2020), where there was a statistically significant predictive relationship between caring school leadership and enabling school structure on virtual teachers' psychological capital, $F(2, 106) = 19.76, p < .001, R^2 = .272$. In both studies, there was a large effect size found between the linear combination of caring school leadership and enabling school structure in predicting teachers' psychological capital, where the original study found 27% of the variance can be accounted for by this model, and the current study found 22% of the variance of virtual teachers' psychological capital may be explained by the linear combination of caring school leadership and enabling school structure.

As society works to return to normal forms of operation after the pandemic, the results of this study seem to demonstrate that both before and after the pandemic, organizational structure and leadership style may help to explain the variance of psychological capital of online teachers. This finding is significant since schools continue to wrestle with the challenges of teacher attrition and shortages. Job satisfaction and teachers' commitment to the organization have been found to be associated with the level of control teachers feel they have in their work (Chambers Mack et al., 2019; Jeon & Wells, 2018). The current study supports this idea by demonstrating the correlation between online teachers' psychological capital and enabling school structure, which examines the degree the school is more enabling or hindering in the elements of centralization and formalization. Likewise, job satisfaction and teachers' commitment have also been found to be correlated to the degree teachers sense they have administrative support (Geiger & Pivovarova, 2018). This study also supports this by finding that the level of virtual teachers' collective psychological capital, which includes hope, efficacy, resiliency, and optimism, may be explained by the degree they perceive their school leader demonstrating caring school leadership behavior.

The literature identifies leadership style as an antecedent of psychological capital, whereby the research has demonstrated there is a positive predictive relationship with positive leadership styles, such as transformational leadership, authentic leadership, and leader-member exchange (Kong et al., 2018; Loghman et al., 2023; Petersen & Youssef-Morgan, 2018). Even though this study did not specifically examine whether caring school leadership or enabling school structure are antecedents, the study appears to support this prior

research on the impact of positive leadership styles. As a standard multiple linear regression, the current study demonstrated that there is a statistical and practical significance, whereby the relationship of caring school leadership and enabling school structure may explain some of the variance in virtual teachers' psychological capital. Since psychological capital has been found to have positive outcomes such as job satisfaction, work performance, and school climate (Eldor & Shoshini, 2016; Kurland, 2019; Louis et al., 2016), caring school leadership and enabling school structure are models that should be more closely examined when looking to improve the organizational climate and culture of online schools.

This study also contributes to research on virtual schools. Research has found that leadership can have a positive impact on the well-being of employees, though the e-leader may have to utilize different forms of communication tools to be effective (Ahuja et al., 2023). Studies have found that caring school leadership is contextual and the form it takes in one context may not necessarily work in another (Smylie et al., 2016; Ryu et al., 2022). Prior research on caring school leadership has primarily looked at differing brick-and-mortar school contexts. This study expands the look at the unique nature of place, the context in which leadership occurs, by examining it within online schools.

This study found that caring school leadership is also a significant factor within online schools. For example, Berkovich (2023) examined caring school leadership in the context of "emotional geographies," which identified five areas where emotional distance can develop among staff. One of the emotional geographies classified within the theoretical framework of emotional geography is physical distance. Physical distance is defined as educators having limited time to interact and build relationships with colleagues. Berkovich's study found that caring school leadership is positively correlated to minimizing emotional distance. Due to the nature of virtual schools, physical distance is a stark reality for online educators who work remotely. The current study supports Berkovich's findings that caring school leadership may positively predict the combined hope, efficacy, resiliency, and optimism of online teachers. This study supports other studies (Louis & Murphy, 2017; Smylie et al., 2016; van der Vyver et al., 2014a) that encourage school leaders to implement intentional, caring leadership behaviors, such as active listening, transparency, recognizing them for outcomes and accomplishments, and attentiveness by showing genuine interest in getting to know them as individuals. However, more research is needed on the benefits and outcomes associated with caring school leadership, and which leadership behaviors may most contribute to teachers feeling valued and appreciated (van der Vyver et al., 2014a).

It should be noted that there are several limitations to this study. While using a convenience sample from one school system, without random assignment, the results cannot make causal claims and cannot be generalized to all online schools. For example, the school used in this study is more of a synchronous model, whereas many virtual schools use a more asynchronous model. Also, virtual schools can also be structured where the faculty are expected to work from a centralized location, instead of working remotely. Another limitation is that the study was cross-sectional, similar to the original study (Jensen, 2020). However, since the results found in this study, which was conducted at a different time of the school year than the original study, this limitation may not be as significant.

It should also be noted that even though the minimum sample size was met, the overall participation rate from the sample population was about 39%. One possible reason for this could have been the timing of when the survey was conducted, which was near the end of the school year. When considering other limitations, another area that needs to be mentioned is the possibility of confounding variables that may skew the results. For example, in this

particular study, the majority of participants were over the age of 40 (71.7%). Likewise, 86.8% of participants had nine or more years of teaching experience in the online model. These may be factors that impact or influence the results. More research, where these variables are controlled, is recommended.

A core purpose of standard multiple linear regression is explanation; that is, to estimate the degree the predictor variables account for the variance on the criterion variable (Keith, 2019; Warner, 2013). A common limitation of the standard multiple regression is that it does not control for other possible explanations. For example, one possible explanation could be reverse causality. This is when it is assumed that A causes B, but in effect, it may be that B causes A (Sibulkin & Butler, 2019). More specifically, as it relates to this specific study, it is possible that instead of caring school leadership and enabling school structure explaining the variance in psychological capital, it may be the reverse, where psychological capital explains variance in teachers' perception of leadership style and school structure.

This study focused on the association between the criterion and predictor variables, therefore, it is important to also note that another limitation is the study cannot show causation. This is a general limitation of standard, or simultaneous regression analysis, where all variables are entered at the same time. For this reason, a recommendation for future research is to use structural equation modeling to examine the various complex associations between multiple variables and consider alternative explanations or models. Likewise, a causal-comparative study may also assist in addressing the possibility of reverse causality, in which multiple school systems would be examined, where caring school leadership scores and enabling school structure scores are found to be low in one, medium in another, and high in the last, to see if there is a difference in the overall psychological capital scores of the faculty among these three schools.

Another recommendation would be to conduct a mixed-methods study where researchers might find what specific caring school leadership behaviors have a greater impact on the psychological capital of online teachers. Since caring leadership is more art than science (Younger, 2021), it may look different from one context to the next (Ryu et al., 2022). For this reason conducting a mixed-methods study, where a qualitative analysis is incorporated, may help determine if there are trends of certain behaviors and actions of school leaders, which may be identified as resonant with faculty working within online schools, in demonstrating care and concern for the overall well-being of teachers.

Declarations

Institutional Review Board Statement: The study was found to be exempt by the Institutional Review Board of Liberty University.

Conflict of Interest: The author declares there are no conflicts of interest.

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